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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/673,534 | 09/29/2003 | Raghuram Narayan | INTEL/14492 | 1850 |
| 34431 | 7590 | 05/05/2006 | EXAMINER | |
| HANLEY, FLIGHT & ZIMMERMAN, LLC 20 N. WACKER DRIVE SUITE 4220 CHICAGO, IL 60606 | | | NGUYEN, DUNG T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2828 | |

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

Office Action Summary

Application No.

10/673,534

Applicant(s)

NARAYAN, RAGHURAM

Examiner

Dung (Michael) T. Nguyen

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-11 and 22-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-7, 22-23, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Jerman et al. (2001/0036202).

With respect to claims 1, 6-7, 22, and 25, Jerman et al. show in Fig. 8 and 10 an external cavity optical transmitter comprising: a gain chip (502) to emit optical energy, the gain chip including a reflective portion (162b in Fig.8), an actuator (508), a lens (503) coupled to the actuator and configured to receive optical energy emitted by the gain chip; a grating (504) to receive optical energy emitted by the gain chip and to reflect at least a portion of the optical energy emitted by the gain chip; a reflector (506) to receive optical energy reflected from the grating, the reflector and the reflective portion of the gain chip forming an optical resonant structure (external laser cavity must have the reflector and the reflective portion of the gain chip forming an optical resonant structure); and a processing unit (controller) (para.0054) coupled to

Art Unit: 2828

the actuator to position the lens at a location to select a wavelength of operation of the optical resonant structure (see para.0078).

With respect to claims 2, 4, and 23, Jerman et al. disclose a two-axis actuator (para.0078) and the lens (503) is movable in planes perpendicular to an optical axis on which the optical energy flows.

With respect to claims 5 and 26, Jerman et al. disclose a detector 277 (Fig.8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 8-11, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jerman et al. (2001/0036202) in view of Chapman et al. (2005/0135439).

With respect to claim 3, Jerman et al. disclose all limitations of the claim except for the voice coil actuator.

Chapman et al. teach the voice coil actuator (para.0042).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Jerman et al. what is taught by Chapman et al. to employ an alternative type of actuator (para.0042)

Art Unit: 2828

With respect to claims 8 and 24, Jerman et al. disclose all limitations of the claims except for the electro-optical crystal.

Chapman et al. teach the electro-optical crystal (106) in Fig.6.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Jerman et al. what is taught by Chapman et al. in order to control the change in effective optical path length to tune the wavelength of maximum transmission (para.0065).

With respect to claim 9, Jerman et al. disclose all limitations of the claim except for the etalon.

Chapman et al. teach the etalon (24) in Fig. 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Jerman et al. what is taught by Chapman et al. in order to select a particular wavelength within the ITU grid (para.0035).

With respect to claims 1-11, Jerman et al. disclose all limitations of the claims except for the ITU and the C or L band.

Chapman et al. teach the ITU and the C or L band (it is understood that the C or L band must be within the range of the ITU requirement) (para.0001).

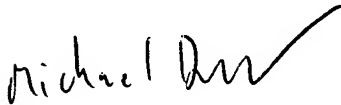
It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Jerman et al. what is taught by Chapman et al. to have the optical energy within the range of the ITU as required in the fiber optic telecommunications (para.0001).

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

A handwritten signature in black ink, appearing to read "Michael D. Nguyen", with a large, sweeping checkmark-like flourish at the end.

Michael Dung Nguyen

04/20/06